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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/515,780	02/29/2000	Oliver Daude	FR9-99-001	1931
25259	7590	06/03/2004	EXAMINER	
IBM CORPORATION			KENNEDY, LESA M	
3039 CORNWALLIS RD.				
DEPT. T81 / B503, PO BOX 12195				
REASEARCH TRIANGLE PARK, NC 27709			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/515,780	DAUDE ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Lesa Kennedy	2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 February 2000.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1,4-12,14 and 17-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1,4-12,14 and 17-19 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 29 February 2000 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date .

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

**DETAILED ACTION**

1. This action is responsive to the Response to Office Action filed on March 8, 2004. Claims 1, 4-12, 14 and 17-19 are pending examination. Claims 1, 4-12, 14 and 17-19 represent a method and program product directed towards selecting a web firewall in a TCP/IP network.

***Response to Arguments***

2. Applicant's comments regarding the forthcoming declaration have been noted.
3. Applicant's arguments (see page 6 of the Response to Office Action filed March 8, 2004) with respect to claims 8-10 and 12 have been fully considered and are persuasive. The 35 U.S.C 112, second paragraph rejections of claims 8-10 and 12 have been withdrawn.
4. Applicant's arguments (see pages 7-9 of the Response to Office Action) with respect to common ownership are insufficient for being inconspicuous. MPEP 706.02(l)(2) states that the statement concerning common ownership should be clear and conspicuous (e.g., on a separate piece of paper or in a separately labeled section).

***Claim Objections***

5. Claim 9 is objected to because of a grammatical error. Applicant is advised insert the words "to a" between "system" and "web browser" to improve the clarity of the claim.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4-7, 11-12, 14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Law et al. ("A Scalable and Distributed WWW Proxy System", Proc. IEEE Intl. Conf. Multimedia Computing and Systems, June 3-6, 1997, pp. 565-571) in view of Caccavale et al. (U.S. Patent No. 5,459,837), and further in view of Welter et al. (U.S. Patent No. 6,138,157).

Law teaches the invention substantially as claimed including a distributed proxy server architecture with load balancing capability (see abstract).

As to claim 1, Law teaches a method comprising the steps of: measuring performance and availability of firewall server [Sec. 1, col. 2, lines 2-5; Sec. 2, par. 3; Law discloses measuring the response time and availability of proxy (firewall) servers], wherein the step of measuring the performance and availability of each firewall server comprises the further step of measuring the response time needed for retrieving from a web server [Sec. 5, par. 2; Law discloses measuring the response time for retrieving data from a web server] known information, in particular one or a plurality of known web pages, through each firewall server [pg. 570, col. 1, lines 4-5; Law discloses retrieving the same

HTML document during testing] and wherein the step of measuring the response time comprises the further step of:

establishing a connection with the web server through each firewall server [pg. 570, col. 1, last paragraph; Law discloses a connection from a client to a web server through the testing system (firewall servers)]; and  
retrieving the one or a plurality of known web pages from the web server [pg. 570, col. 1, lines 4-5; Law discloses retrieving the same HTML document during testing];

and

dynamically selecting a firewall server according to the performance and availability measurements [Sec. 2, par. 2; Law discloses dynamically distributing transactions among the proxy servers].

Law does not expressly teach the limitations of using measurement probes, and checking that the retrieved one or plurality of web pages contain one or a plurality of known keywords.

However, Caccavale teaches a method for monitoring the performance of servers in a network and for suggesting an appropriate server to a client requesting a service (see abstract). Caccavale teaches the limitation of using measuring the performance of each server using measurement probes [col. 4, line 53 – 57].

Welter teaches a method for testing web sites hosted by web servers coupled to a TCP/IP protocol network. Welter teaches the limitation of checking that the retrieved one or plurality of web pages contain one or a plurality of known keywords [col. 7, line 66 – col. 8,

line 6; Welter discloses checking retrieved HTML data for expected content (known keywords)].

Law, Caccavale and Welter are analogous art because they relate to analyzing the performance of servers.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Law in view of Caccavale so as to analyze the proxy servers' performance using measurement probes. One would be motivated to do so to control the accuracy of the analysis by modifying the number of probes.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Law in view of Welter so as to check the content of retrieved HTML data. One would be motivated to do so to enable correction of detected errors.

As to claim 4, the combination of Law in view of Caccavale, in view of Welter teaches the method of claim 1, comprising the further step of:

comparing each firewall server said measured response time with previous measured response times [col. 7, lines 2-20; Caccavale discloses measuring a server's current response time with a previous response time to determine if its performance has degraded]; and,

determining for each firewall the degradation or the amelioration of the measured response time [col. 7, lines 2-20; Caccavale discloses measuring a server's current response time with a previous response time to determine if its performance has degraded].

As to claim 5, the combination of Law in view of Caccavale, in view of Welter teaches the method of claim 1, comprising the further step of:

detecting failures on each firewall server [Sec. 4.4, par. 1; Law discloses that dysfunctional (failed) proxy servers are removed from a list of available proxy servers]; and excluding firewall servers in failure from the step of selecting a firewall server [Sec. 4.4, par. 1; Law discloses that dysfunctional (failed) proxy servers are removed from a list of available proxy servers].

As to claim 6, the combination of Law in view of Caccavale, in view of Welter teaches the method of claim 1, wherein the firewall server is a proxy server or a socks server [Law; pg. 565, col. 2, lines 2-5].

As to claim 7, the combination of Law in view of Caccavale, in view of Welter teaches the method of claim 1 comprising the further steps of:

processing performance and availability measurements from a single universal resource locator system [pg. 570, col. 1, lines 4-5; Law discloses retrieving the same HTML document during testing]; and,

dynamically creating a configuration file based on the performance and availability measurements on said universal resource locator (URL) system for selecting said firewall server [Sec. 4.4, par. 1; Law discloses a distribution list (configuration file) for selecting available proxy servers].

As to claim 11, the combination of Law in view of Caccavale, in view of Welter teaches the method of claim 1 comprising the further steps of:

pre-selecting a backup firewall server in a background process [Caccavale; col. 5, lines 44-50]; and,

switching to said backup firewall server in case of failure of the selected firewall server [Caccavale; col. 5, lines 44-50].

As to claim 12, the combination of Law in view of Caccavale, in view of Welter teaches the method of claim 1 wherein the step of selecting a firewall server according to performance and availability measurements comprises the further step of selecting the firewall server according to the Internet Protocol (IP) address of the web browser [Sec. 2, par. 2; Law discloses that a client (web browser) request is sent to a depot which selects the appropriate proxy (firewall) server to handle the request. The depot is chosen based on locality (IP address of the web browser)].

Claims 14 and 17-19 represent program product claims that correspond to method claims 1 and 4-6. They do not teach or define any new limitations above claims 1 and 4-6, and therefore are rejected for similar reasons.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Law et al. in view of Caccavale et al., further in view of Welter et al., and further in view of Yamane et al. (U.S. Patent No. 6,317,786).

As to claim 8, the combination of Law in view of Caccavale, in view of Welter teaches the invention substantially as claimed (see rejection of claim 7 above). The combination does not expressly teach the limitation wherein the step of dynamically creating a configuration file is processed by a common gateway interface (CGI) on said universal resource locator (URL) system.

However, Yamane teaches a method for collecting data on web server responses to web page requests, and providing reporting of the data as well as automatic and manual analysis tools. Yamane teaches the limitation of dynamically creating a configuration file processed by a common gateway interface (CGI) on said universal resource locator (URL) system [col. 12, lines 22-60; Yamane discloses a web server that generates performance data (configuration file) and conforms to CGI standards].

Law and Yamane are analogous art because they relate to analyzing the performance of servers.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Law in view of Caccavale, in view Welter, in view of Yamane to process the performance and availability data by a CGI. One would be motivated to do so since CGI is a widely used standard interface for web servers.

As to claim 9, the combination of Law in view of Caccavale, in view of Welter, in view of Yamane teaches the method of claim 1 comprising the further step of downloading the configuration file from a universal resource locator (URL) system to a web browser [col. 21, line 53 – col. 22, line 2; Yamane discloses displaying (downloading) the performance statistics (configuration file)].

As to claim 10, the combination of Law in view of Caccavale, in view of Welter, in view of Yamane teaches the method of claim 9 wherein the steps of measuring performance and availability and of dynamically selecting a firewall server are periodically processed in the universal resource locator (URL) system [Sec. 2, par. 2-3; Law discloses dynamically distributing transactions among a group of proxy servers based on server performance] and

the configuration file created by the common gateway interface (CGI) is periodically downloaded to the web client [col. 21, lines 6-10; Yamane discloses that the displayed (downloaded) performance data (configuration file) is periodically updated].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lesa Kennedy whose telephone number is (703) 305-8865. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

*Andrew Caldwell*  
Andrew Caldwell